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Typology of State Types: Persistence and Transition

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ABSTRACT

Research on state fragility has seldom examined questions of persistence and transition of

states. We develop a six-fold typology of states to examine how key structural features of

states evolve and contribute to successful exits from fragility in some cases and

persistence in others. Particularly worrisome is the lack of positive transition among the

weakest states. Our findings are derived from a minimalist construct of a refined time

series dataset involving state indicators of authority, legitimacy, and capacity. Case studies

of some of the more turbulent examples support our state trajectories. Additionally,

changes in legitimacy most often led state transitions into or out of fragility. Implications

of intervention policy for transitioning states out of fragility are addressed, and these are

given particular focus since fragile states experience at least twice the intensity/incidence

of internal armed conflict compared to other states.

KEYWORDS: armed conflict, failed states, foreign policy, authority, legitimacy, capacity

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States that are persistently fragile pose an unmet challenge to policy makers, theorists, and analysts alike. States are thought to progress over time, but for many this is simply not true – some experience quick reversals while some improve in certain areas yet weaken in others. Also, stagnant states that show little indication of exiting out of their political, economic, and social malaise have consequently become some of the biggest recipients of foreign aid. Such states of persistent stagnation are considered to be stuck in a fragility trap. For example, Cilliers and Sisk (2013) forecast that ten African countries are at risk of remaining fragile beyond 2050. Given that fragile states tend to be more prone to conflict, the fragility trap is thus evocative of Collier's (2007) conflict trap. However, this correlation notwithstanding, it is important to note that not all fragile states are affected by conflict just as most, but not all, countries in conflict are fragile by definition.

Studies focusing on fragility persistence have largely either draw on *ad hoc* and anecdotal evidence (Pritchett, Woolcock, and Andrews 2012), or are based on limited interpretations of state development equivalent to economic growth (Andrimihaja, Cinyabuguma, and Devarajan 2011). Pritchett et al. (2012) argue that this persistence is predicated in the kinds of aid delivered to fragile states and subsequent lack of an optimal response that undermines the development of strong institutions and public administration strategies. They argue that states adopt either "isomorphic mimicry" to maintain international legitimacy despite structural dysfunctionality or "premature load bearing", which allows failure to exist while creating the illusion of implementing effective developmental policies and the trappings of modernization. Andrimihaja et al. (2011) find that Africa's fragile states grow more slowly than non-fragile states and the probability that a fragile state in 2001 was still fragile in 2009 was 0.95. According to these authors, corruption, political instability and violence, insecure property rights, and unenforceable contracts conspire to create a "slow-growth-poor-governance equilibrium trap" into which these states fall.

States vary widely in their capabilities both across different dimensions of stateness and across time; moreover, the patterns of such variance themselves differ markedly from state to state. Any state may be relatively strong in certain dimensions of stateness even if it is

critically weak in others. Few states suffer catastrophic failure in all areas of stateness simultaneously. The idea that "all good things go together" (Huntington 2006) simply cannot be justified, *a priori*, in a study of how states evolve. One state may possess considerable legitimacy with its population despite limited ability to provide for public goods, while another may exhibit a robust capacity to defend its borders, but not enjoy the confidence and loyalty of its population. In essence, single indices to define stateness oversimplify the quality and function of states (Rotberg 2004).

Understanding the persistence of fragility presents an empirical challenge to the policy prescription that states are constantly modernizing in teleological terms with the strong state as the main referent. Decades-old strong state approaches, as embodied in theories of modernization put forward by Rostow (1960), have been contested by Huntington (2006). Huntington proposed that institutional breakdown is a consequence of rapid social mobilization, and thus state order and coherence became a primary focus in understanding how states decay or reverse their trajectory. Jackson (1990) offered up the equally controversial concept of "quasi-states" to describe polities in Africa that, while ostensibly sovereign, demonstrably lacked vital aspects normally associated with a functional state.

One of the general conclusions of these findings is that core structural elements of stateness represented by authority, legitimacy, and capacity provide key organizing concepts for evaluating change over time. In brief, authority refers to the ability of leaders to enact binding legislation over their populations and to provide them with a stable and secure environment. Legitimacy refers to the extent to which leaders have the support of the population along with international recognition of that support. Capacity refers to the power of leaders to mobilize resources for productive and defensive purposes.

To encompass the above, we develop a typology of states based on a "minimalist" construct of the Country Indicators for Foreign Policy (CIFP) fragile states project and its core structural dimensions of Authority, Legitimacy, and Capacity (A-L-C). <sup>1</sup> This

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<sup>&</sup>lt;sup>1</sup> See <a href="www.carleton.ca/cifp">www.carleton.ca/cifp</a> and Carment, Prest, and Samy (2008, 2009) for detailed development of the A-L-C construct.

multidimensionality of stateness closely follows the condition of combined qualities of statehood first introduced by Nettl (1968) as a continuous variable, one that could be disaggregated into its constituent elements. In essence, Nettl's formulation enables a description of "more or less stateness" along one or more dimensions. This multidimensionality was also central for examining the prediction of potential state failures (Tikuisis, Carment, and Samy 2012).

Since research on state fragility has not sufficiently examined questions of persistence, we also develop a time series dataset conducive to explaining state persistence over time as well as transitions into and out of fragility. Thus, this paper's primary contributions are concept development, research design, and data creation. We are thus able to unambiguously characterize states more richly than existing indices that simply rank states along a spectrum from strong to weak. While the paper does not generate a general theory of state evolution, we are able to specify the conditions under which specific types of states are likely to improve or deteriorate over time.

Our typology-based approach to theory building has several advantages: 1) the development of this explanatory typology is based on pre-existing theory, yet it allows for further refinement and testing; 2) it lends itself to determining the sequence of transitions from one state type to another rather than just capturing a single moment in time; and 3) it is conducive to identifying potential counterfactual cases – that is, what category might a state have transitioned to if the state had taken a different decision (King, Keohane, and Verba 1994; Elman 2005; Goertz 2006). Building such a typology also enables us to more confidently generalize our findings in an inductive manner, an approach that has been advocated in the methodologically oriented literature (King et al. 1994; Bates et al. 2000). However, the results we produce from our empirical analysis, while congruent with cases to demonstrate state types in greater detail, should be taken as indicative rather than definitive since they are not subjected to statistical testing.

#### RESEARCH DESIGN AND METHODOLOGY

We begin with the rationale for developing a minimalist construct of a state typology model (STM), similar to the approach taken by Gravingholt, Ziaja, and Kreibaum (2012). Models of state condition often rely on composite indicators of state fragility that can consist of a few to hundreds of indicators. Although many indicators offer the ideal of comprehensive coverage, several disadvantages arise. One is that indicator data are not always available over periods of interest with the result that state condition might be misrepresented. Another is the redundancy of including several indicators that essentially describe similar state characteristics, as for example metrics of education (e.g., literacy rate, school enrolment). Unless such redundancies are weighted or eliminated, biases can be created by oversampling. Finally, attribution or causality of state deterioration becomes problematic with indicators such as infant mortality that correlate highly with state failure (Goldstone et al. 2000), but offer little policy value for intervention.

A minimalist construct comprising few but meaningful indicators can mitigate the above disadvantages. Specifically, indicators can be chosen on the basis of unique representation and good data availability. While the value or importance of an indicator is unavoidably subjective, fewer indicators are more easily discriminated. The construct of the minimalist STM developed herein consists of several steps, beginning with the selection of indicators followed by data preparation and the categorization of states.

## Choice of Data

Mata and Ziaja (2009) have documented and analyzed eleven cross-country fragility and conflict indices regularly published by various organizations, including the CIFP – Fragility Index (FI). Policy makers use these indices in both aid and foreign policy contexts. Indices such as the Failed States Index (FSI), recently renamed the Fragile States Index of the Fund for Peace<sup>2</sup>, are less suited to examine the evolution of states because of their limited temporal coverage (i.e., since mid-2000s). Additionally, the proprietary nature of FSI indicator selection makes it difficult to know what aspects of fragility are emphasized. Other indices such as the Brookings Index of State Weakness<sup>3</sup>

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<sup>&</sup>lt;sup>2</sup> See http://ffp.statesindex.org/fsi-trends-2013.

<sup>&</sup>lt;sup>3</sup> See <a href="http://www.brookings.edu/research/reports/2008/02/weak-states-index">http://www.brookings.edu/research/reports/2008/02/weak-states-index</a>.

are only available for one year while the World Bank lists of Low-Income Countries Under Stress and Fragile States<sup>4</sup> cover few countries. The State Fragility Index (SFI; Marshall and Cole 2014) categorizes states from 0 (no fragility) to 25 (extreme fragility) based on indicators of security, political, economic, and social effectiveness and legitimacy. While these indicators fall under state dimensions of authority, legitimacy, and capacity, the SFI does not specify state types.

Since its inception, CIFP has regularly published data that ranks countries not only according to the FI but also along different A-L-C dimensions (Carment et al. 2008, 2009). We extend this approach by clustering states that share commonality along specific values of A, L, and C that allows a separation of states according to different types of weakness and strength. This also allows the identification of states that are particularly vulnerable for different reasons. We achieve this discrimination by developing a minimalist version of the CIFP-FI.

#### *Indicators*

Indicator data were extracted from the CIFP database. Data prior to 2000 are increasingly sparse and were considered insufficiently complete for the purpose of developing STM with as many states as possible and minimal data gaps. Hence, model development was limited to an 11-year period from 2000 to 2010 inclusive. All indicators were eligible for acceptance, but were excluded if data gaps were excessive during the 11-year period. With the exception of the UN Human Development Index (HDI), excessive gaps meant missing data for two or more consecutive years. Indicators were also selected to provide broad representation within an A-L-C dimension and with minimal overlap between dimensions. This was achieved by subjecting candidate indicators to a correlational analysis and selecting indicators with high intra-correlation within a state dimension and low intercorrelation between state dimensions.

The eleven indicators itemized below (four each for A and L, and three for C described in detail with access/source information in the online appendix "DEFINITION OF

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<sup>&</sup>lt;sup>4</sup> See <a href="http://data.worldbank.org/about/country-classifications">http://data.worldbank.org/about/country-classifications</a>.

INDICATORS") met the above criteria of data availability and discrimination<sup>5</sup>, but only for 131 countries. More countries could be included by reducing the number of indicators or relaxing the missing data criterion, but this was not deemed acceptable for methodological rigor.

Authority:

- Government Effectiveness (policy formulation and implementation)
- Regulatory Quality (regulation of private sector development)
- Political Stability and Absence of Violence (government stability)
- Refugees Produced (refugee status)

Legitimacy:

- Freedom of the Press (free flow of information)
- Political Rights (PR) & Civil Liberties (CL) (freedom of choice)
- Voice and Accountability (free expression)
- Human Rights Empowerment (composite measure of freedoms)

Capacity<sup>6</sup>:

- GDP total (Gross Domestic Product in constant 2000 US\$)
- Reserve Holdings (total gold reserves in current US\$)
- Human Development Index (HDI) (composite measure of human development)

## Data Preparation

Single year data for "Government Effectiveness", "Regulatory Quality", and "Political Stability and Absence of Violence" were missing for 2001. HDI data were missing from 2001 through 2004, inclusive. In each case, missing data were estimated using linear interpolation.<sup>7</sup>

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<sup>&</sup>lt;sup>5</sup> Although all indicators correlated significantly with one another, the average intra-correlation of r = 0.75 was markedly higher than the average inter-correlation of 0.52.

 $<sup>^{6}</sup>$  Military expenditure was considered as an additional indicator of capacity, but data were insufficient. However, the correlation between GDP total, which was used, and military expenditure based on 116 states in the study was significant at r = 0.94, indicating that economic size can serve as a proxy for military expenditure.

Mean indicator values of the years 2000 and 2002 were used to estimate the missing single indicator values for 2001, which is equivalent to applying infinite imputation using random estimates. Linear regression was applied to estimate HDI for the years 2001 through 2004 bounded by the values at 2000 and 2005 assuming monotonicity. We tested HDI data for monotonicity using values from 2005 through 2010 inclusive by conducting a correlational analysis of the regressed values against the reported values. A high

Assessments of civil liberties and political rights were averaged as a single indicator under "Restrictions on PR & CL". HDI was weighted twice as much as the other indicators under Capacity given that it comprises several sub-indicators (life expectancy, education, and income). Both "Economic Size – GDP total" and "Reserve Holdings – total" were log-transformed on the basis that purchasing parity/power does not increase proportionally with increased size<sup>8</sup>, which resulted in a more uniform representation of wealth. Similarly, "Refugees Produced" was log-transformed on the assumption that the impact of refugees does not increase proportionally with increased numbers.

All raw and processed (post-interpolations and log-transformations) indicator values were linearly scaled from 1 to 9 based on their min-max range for all 131 states from 2000 through 2010 inclusive<sup>9</sup>. Scaled values from 1 to 9 represent best to worse performance. The resultant scores for A and L were based on unweighted averages of their respective four scaled indicators. The score for C was based on the average scaled values of "Economic Size – GDP total", "Reserve Holdings", and twice HDI. Finally, the fragility index, FI, was based on an unweighted average of A, L, and C.

# State Categorization

The 11-year average values of A, L, and C were plotted for each state (see Figure 1). Evident among states that exhibit strong capacity (i.e., low C values) is a distinct bifurcation of low and high legitimacy. Opposite these zones are states of high A, L, and C values signifying high fragility, and in-between lie states of varying performance.

degree of monotonicity was indicated with a total of 89.3% significant correlations and an overall average correlation of r=0.93. We also tested the consequence of assuming random HDI values for the years 2001 through 2004, also bounded by the values at 2000 and 2005. This exercise, which did not ensure monotonicity, did not change the state categorizations as tabled in the online appendix "STATE CATEGORIZATION" under the assumption of HDI monotonicity. This invariance to the method of imputation is due to the relatively small difference between the scaled 2000 and 2005 HDI values (average of 0.023) compared to the min-max range of the entire dataset (0.682). Thus, our assumption of HDI monotonicity from 2000 to 2005 not only concurs with the observed trend from 2005 to 2010, but does so without biasing state categorization.

<sup>&</sup>lt;sup>8</sup> Log-transformation is similarly applied to the income component of HDI (see <a href="https://data.undp.org/dataset/Table-2-Human-Development-Index-trends/efc4-gjvq">https://data.undp.org/dataset/Table-2-Human-Development-Index-trends/efc4-gjvq</a>).

<sup>&</sup>lt;sup>9</sup> This ensured that state performance over time would be judged by relative changes to itself against an all-inclusive fixed baseline.

Exploratory clustering algorithms can be used to sort such data. For example, using different indicators but the same A-L-C construct, Gravingholt et al. (2012) applied a Gaussian Mixture Model to report six distinct groups in which 89% of states were classified with an uncertainty below 0.25 (i.e., not all states could be fitted with a probability at least three times higher than belonging to another group). Indeed, the authors claimed that the methodology is not "ideal to assess exactly which group a certain country belongs to". We applied a different clustering algorithm<sup>10</sup> to group our sample of 131 states according to their average A-L-C values and also found similar ambiguity in the selection criteria of the grouping variables. Such ambiguity makes it nearly impossible to track a state's trajectory over time since grouping thresholds vary from year to year. To ensure that states could be classified unambiguously, an empirical "fixed" typology of state types was sought, which would enable an analysis of persistence within and transition between groups from year to year.

Separation of highly functional (low A-L-C scores) from fragile (high A-L-C scores) is straight-forward. The states in-between require a more nuanced discrimination. Those with good capacity (low C) but poor legitimacy (high L) stand out as materially functional but politically susceptible, and are therefore classified as brittle. Opposite these states are those with adequate authority and legitimacy, but burdened with poor capacity, which we classify as impoverished. Sandwiched between these two groups and the fragile states are a group that we classify as struggling, essentially viewed as a junction into or out of fragility. Criteria for these five classifications, as defined in Table 1, were guided by the clustering algorithm, but ultimately selected to ensure a meaningful and pragmatic demarcation. All states outside these criteria generally fell below the highly functional status, and were thus classified as moderately functional by default.

Figure 1 here

Table 1 here

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 $<sup>^{10}</sup>$  STATISTICA $^{\$}$  K-means Cluster with a specification of six groups.

#### RESULTS

Figure 1 shows the approximate location of the resultant six state types. The table found in the online appendix "STATE CATEGORIZATION" lists the 131 states categorized according to their 11-year average A, L, C, and FI scores using the criteria of Table 1, and their trajectory from 2000 to 2010 inclusive.

The majority of states (n = 88; 67.2%) did not transition out of their categorization during the 11-year study period. Of the 43 states that underwent transitions, most were weak including all but one struggling state and 9 of the 12 fragile states. In contrast, only 2 of the 29 highly functional states transitioned, and these were from M to H status (Lithuania and Poland). Also, there were no transitions between fragility and moderately functional status except for Nepal when legitimacy improved sufficiently to propel the state from F to M status in 2009. Disregarding this single case, Figure 2 shows all the observed transitions, noting in particular no transitions between the upper (H and B) and lower (I and F) tiers of state status, except through the middle tier (M and S). Further, all transitions out of fragility were limited to struggling status, alluded to earlier as the only viable trajectory towards improvement.

# Figure 2 here

Transitions over the 11-year period of study were generally positive except for states classified as brittle. Specifically, the number of states classified as H rose from 29 in 2000 to 32 in 2010; conversely, the number declined from 53 to 52 for M, 15 to 11 for I, 12 to 11 for S, and 12 to 9 for F. For B states, the number rose from 10 to 16. Taken together, the overall trend was positive and driven by a 10.7% improvement in state capacity (both economic and human development indicators), while authority and legitimacy deteriorated by 3.1 and 3.5%, respectively, leading to an overall slight improvement in FI by 1.7%.

# Role of A-L-C in State Transition

STM can be used to identify the A-L-C dimension that changed most during transitions, in particular, between struggling and fragile status. This can be especially informative when targeting state function for intervention either to pre-empt further deterioration (e.g., S to F) or to facilitate improvement (e.g., F to S). In total, eight  $S \to F$  and thirteen  $F \to S$  transitions occurred (see table in the online appendix "STATE CATEGORIZATION"). The state dimension of greatest change was noted for each transition and in all but one case, 11 the change was a deterioration or an improvement in concurrence with the overall change in FI. In five of the remaining seven  $S \to F$  transitions and in eight of the remaining twelve  $F \to S$  transitions, the largest change occurred in legitimacy. Change was larger in authority in two  $S \to F$  and two  $F \to S$  transitions, and in capacity in two  $F \to S$  transitions. In sum, transitions into and out of F via S status were mostly led by changes in state legitimacy.

## Case Studies

We clarify the status of certain weak states that exhibit particularly turbulent trajectories to provide supporting evidence of STM by comparing our observed state transitions to actual events. The case studies (detailed in the online appendix "CASE STUDIES") illustrate how both discreet "trigger" events and gradual structural deterioration/improvement can shape the trajectory of a given state. Haiti is an example that first oscillated between S and F status, and then between S and M status. Mauritania oscillated between S and I status before deteriorating further to F status. Uganda, on the other hand, is an example of eventual improvement from F to M status. And Pakistan is an example that exhibited considerable turbulence between S, M, and B status.

## Armed Conflict

The relationship of a state's status and its propensity to internal armed conflict is particularly relevant to the discourse on state fragility. Armed conflict within a state (i.e., intrastate conflict) is expected to be highly likely in fragile/failing/failed states (Grono

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<sup>&</sup>lt;sup>11</sup> In the case of Yemen, borderline scores of A and C (5.99 and 6.00, respectively) indicated a change in FI that was opposite to the changes in A and C.

2010).<sup>12</sup> While armed conflict can occur in stronger states, such states can usually respond without significant disruption in state function. Fragile states, on the other hand, are further weakened by armed conflict and often require external intervention at considerable cost to restore stability. Of primary interest is whether the typology of states developed herein concurs with the expected susceptibility of fragile states to armed conflict. We explored the relationship between state type and armed conflict, but refrain from addressing the question of "reverse causality" (i.e., whether state fragility facilitates conflict or conflict facilitates fragility is an inquiry beyond the scope of the present study).

Our analysis (detailed in the online appendix "ARMED CONFLICT") indicates that fragile states experienced fatal armed conflict at least twice the integrated intensity and duration as compared to struggling and brittle states, and even more so compared to other state types. Armed conflict in the fragile states of this study was also confined to Africa with the sole exception of Tajikistan. Further, the propensity of armed conflict in fragile states is exacerbated by their inability to respond effectively, thus facilitating long periods of turbulence in most cases.

## **DISCUSSION**

The categorization of states developed herein stemmed from a need to improve our understanding of the role and importance of the dimensions of stateness when states become weak and vice-versa. A single index such as FI, SFI, or FSI cannot provide the explanatory fidelity and enriched policy guidance that the A-L-C dimensions of stateness offer. Specifically, what combination of a state's authority, legitimacy, and capacity make that state highly functional at one extreme and fragile at the other? Using a minimalist construct of the CIFP model of state fragility, A-L-C scores revealed a bifurcation at a legitimacy score of about 5.5 (Figure 1) signaling at least two types of states. Further disaggregation suggested four additional state types leading to the six-fold typology model.

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<sup>&</sup>lt;sup>12</sup> Also see <a href="https://www.gov.uk/government/publications/future-character-of-conflict">https://www.gov.uk/government/publications/future-character-of-conflict</a>.

These demarcations were based on specific thresholds of A, L, C, and FI, which were guided by a clustering algorithm and rationally assigned to categorize states in meaningful groups with pragmatic utility. Although all states cannot be expected to fit perfectly under such fixed and convenient constraints, the classifications and transitions in the vast majority of cases concur with expectation, as attested by the case studies. If sufficient data were available for the inclusion of out-of-sample extremely weak states (e.g., Afghanistan, Somalia), it is possible that these might have shifted the scaled values of all other states with potential re- categorization of borderline cases. However, rather than recalibrate STM with new cases if sufficient data become available, it would be prudent to simply categorize the new cases using the selection criteria as stipulated in Table 1 given the plausible findings it yielded. There is the theoretical possibility that the A, L, and/or C values of an extremely weak state not examined herein might exceed the present maximum of 9, but this would not disallow categorizing such states.

For details on the following summary of state trajectories, refer to the table in the online appendix "STATE CATERGORIZATION". All but two highly functional states (n = 29) maintained their status from 2000 to 2010 inclusive. Three other states also transitioned from M to H (Estonia in 2005, Latvia in 2006, and Uruguay in 2007) but their 11-year average fragility index relegated their overall status to M. Similarly, most moderately functional states (42 out of 56) also retained their status throughout the 11-year period of this study. Interesting exceptions include Armenia, Jordan, Kyrgyzstan, Sri Lanka, and Venezuela that ended in a brittle status.

Moderately functional states outnumbered the other groups and include fairly disparate states exhibiting strong authority and capacity such as Singapore to states with weak authority and capacity such as Bangladesh. It might be prudent to disaggregate these states further for greater clarity. To do so, we advocate sub-categories of strong and weak performing states within the moderately functional status based on whether state authority and capacity were either both below or above 4.5 (approximate midpoint of A and C). For example, strong performers would include Brazil, Israel, and Singapore, while weak performers would include Bangladesh, Kenya, and Sri Lanka.

Brittle states (n = 12) are defined by good capacity and poor legitimacy, but are considered vulnerable to political unrest, especially if unconstrained. While ostensibly capable of responding to armed conflict, brittle states can be susceptible to revolts/uprisings as witnessed in Algeria, Pakistan, and Russia during most of the 11-year period studied herein. More prescient are the highly disruptive 2011 Arab Spring uprisings that occurred without ample warning in Tunisia, Egypt, and Syria just after the present study period (2000 - 2010). Strong economic performers such as Bahrain, Saudi Arabia, UAE, and China are also categorized as brittle, but have clearly been successful in constraining political dissent. This has largely been possible through economic strength and associated monetary appeasement in the three Arab states. <sup>13</sup> Hence, a distinction can be made between politically vulnerable brittle states characterized by weak economic performance and politically stable brittle states characterized as strong economic performers. <sup>14</sup>

Impoverished states (n = 13; Benin, Gambia, Madagascar, Malawi, Mali, Mozambique, Niger, Papua New Guinea, Senegal, Solomon Islands, Tanzania, Uganda, and Zambia) function with sufficient authority and legitimacy, but are handicapped by poor capacity. Most of these states reside in sub-Saharan Africa (n = 11) and were impoverished for most of the 11-year study period, which might qualify them as trapped in poverty. Promising, however, are three states that achieved M status by 2010; these were the Solomon Islands, Tanzania, and Uganda.

Struggling state status (n = 9; Angola, Cameroon, Republic of Congo, Haiti, Liberia, Mauritania, Nepal, Sierra Leone, and Swaziland) was designated for weak states that did not meet the selection criteria for either brittle, impoverished, or fragile status. Their FI values generally fell between those of states in I and F status, and all but one (Cameroon

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<sup>&</sup>lt;sup>13</sup> For example, increased domestic expenditure by Saudi Arab ia has been dubbed the ,national bribe" (Lesch 2012). Also, 2010 GDPpc of Bahrain (\$16.7K in constant 2005 US\$), Saudi Arabia (\$16.0K), and UAE (\$24.2K) greatly exceed that of the conflict-troubled Arab states [Algeria (\$3.1K), Egypt (\$1.6K), Tunisia (\$3.9K)] and Syria (\$1.7K, estimated). GDP source: <a href="http://datacatalog.worldbank.org/">http://datacatalog.worldbank.org/</a>. China is considered as such given its high GDP (2010 \$3.84e<sup>12</sup> in constant 2005 US\$ despite a modest GDPpc (\$2.9K).

was consistently struggling) share turbulent histories, transitioning between S, F, M, and/or I status throughout the 11-year study period.

Fragile states (n = 12) are the polar opposite of highly functional states. Three of these states, Chad, Cote d'Ivoire, and Sudan were consistently at F status throughout the entire 11-year study period. The other nine states (Burundi, Central African Republic, Democratic Republic of Congo, Ethiopia, Laos, Rwanda, Tajikistan, Togo, and Yemen Republic) all share turbulent histories, often shifting to S status and back. This particular category of states provides further evidence for the fragility trap that has been reported elsewhere [recall the 0.95 probability of a fragile state in 2001 still being fragile in 2009 (Andrimihaja et al. 2011) and that 35 countries defined by the World Bank as fragile in 1979 were still fragile in 2009 according to the European Report on Development (2009)].

In sum, the vast majority of states (108/131; 82.4%) ended with the same designation as categorized during the 11-year period ending in 2010. The greatest volatility occurred among the struggling states where six out of nine states ended in a different classification compared to 2000. The persistence of most other states to remain at their long-term designations suggests that state status is fairly steady, perhaps frustratingly so for weak states considered to be "trapped". STM developed herein can provide nuance and guidance in understanding this dilemma, as demonstrated through several cases in the online appendix "CASE STUDIES."

The net implications of our argument are two-fold. First, as Newman (2009) points out, if indeed there is a persistence of state fragility and failure, then there are important questions about why such states deviate from the ideal of the Western state and the modernization processes often equated with development. Or as Pritchett et al. (2012) and others have argued, the paradox where "everyone and no-one believes in modernization" in which fragile states adopt superficially the trappings of statehood while failing to implement effective and endogenous development policies. Second, such persistence largely justifies interventionist policies that seek to rebuild and reconstruct fragile states in the Western image. Although transnational threats such as terrorism have been the single

largest justification for this kind of interventionism, other issues such as human rights violations and genocide have prompted the emergence of the "Responsibility to Protect" doctrine in recent years. Other examples of justifiable intervention include secessionist internal conflict, the rapid and destabilizing movements of people and arms across borders, and the proliferation of weapons of mass destruction.

If unaided or even inadequately aided, fragile states remain at significantly elevated risks of internal armed conflict that can potentially destabilize geopolitical balance and international security. This argument drove foreign policy in the wake of 9/11, but has recently been criticized as misguided interventionism (Mazarr 2013). Yet, fragile states cannot be ignored. The higher incidence of fatal armed conflict in fragile states is disconcerting given that fragile states are poorly equipped to respond effectively to armed conflict <sup>16</sup> and therefore they require external intervention at considerable cost for stabilization. The issue is not whether to intervene, but how. According to our analysis, legitimacy is the dimension of greatest change of states entering or exiting fragility, and therefore warrants primary consideration in intervention strategies. This is consistent with Wesley's (2008) advocacy of attending to political change versus "technocratic reforms" to effect real change.

Furthermore, from a donor perspective, particular attention must be paid to strategic dilemmas of weighting, prioritizing, and sequencing aid instruments at various junctures in the state building process, and to the degree in which specific initiatives might contribute to improved outcomes across the three core A-L-C dimensions of stateness. To the extent that states can be categorized according to the six-fold typology developed in this paper, a more tailored policy to each type of state might be applied. Such nuances cannot be captured by broader categorizations such as "failed" states. Specifically, our analysis suggests that pre-crisis intervention, especially in persistent fragile states, might benefit most from a focus on key structural indicators of weakness in state legitimacy.

<sup>&</sup>lt;sup>15</sup> See <a href="http://www.foreignaffairs.com/articles/58437/gareth-evans-and-mohamed-sahnoun/the-responsibility-to-protect.">http://www.foreignaffairs.com/articles/58437/gareth-evans-and-mohamed-sahnoun/the-responsibility-to-protect.</a>

There is no general causal relationship between state fragility and incidence of armed conflict – i.e., certain states are either fragile (e.g., Cote d'Ivoire, DRC) or become fragile (e.g., Nepal) when conflict breaks out (see tables in online appendices "STATE CATEGORIZATION" and "ARMED CONFLICT").

In summary, STM was developed to provide insight on the role of A, L, and C with regard to the pathways a state can take either towards strength or weakness. It resulted in a meaningful, recognizable, and pragmatic six-fold typology of states that allows states to be unambiguously characterized (qualitatively and quantitatively) more richly than just along a spectrum from strong to weak. It also improved our understanding, through case studies, of how and why states slip into but manage to transition out of fragility, even if for brief periods. And it helped highlight the entrapment of certain states in challenging positions, especially those of fragile status with high susceptibility to internal armed conflict. This was realized through the conceptualization of A-L-C thresholds that, although fixed in this study, can be adjusted, if warranted, to achieve even greater coherence with reality.

A

# **GLOSSARY**

| В    | brittle state status                  |
|------|---------------------------------------|
| C    | state dimension of capacity           |
| CIFP | Country Indicators for Foreign Policy |
| CL   | Civil Liberties                       |
| F    | fragile state status                  |
| FI   | Fragility Index                       |
| FSI  | Fragile State Index                   |
| GDP  | Gross Domestic Product                |
| Н    | highly functional state status        |

state dimension of authority

H highly functional state status
HDI Human Development Index
I impoverished state status
L state dimension of legitimacy
M moderately functional state status

PR Political Rights
S struggling state status
SFI State Fragility Index
STM State Typology Model

## REFERENCES

Andrimihaja, Noro A., Matthias M. Cinyabuguma, and Shantayanan Devarajan. (2011) Avoiding the fragility trap in Africa. World Bank Policy Research Working Paper 5884. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1961471.

Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry Weingast. (2000) The analytical narrative project. *The American Political Science Review* 94(3):696-702.

Carment, David, Stewart Prest, and Yiagadeesen Samy. (2008) State Fragility and Implications for Aid Allocation: An Empirical Analysis. *Conflict Management and Peace Science* 25(4):349-373.

Carment, David, Stewart Prest, and Yiagadeesen Samy. (2009) *Security, Development and the Fragile State: Bridging the Gap Between Theory and Policy*. New York, NY: Routledge.

Cilliers, Jakkie and Timothy D. Sisk. (2013) Prospects for Africa's 26 Fragile Countries. African Futures Paper No. 8 (October). Available at: <a href="http://www.issafrica.org/uploads/AF\_8\_14Oct2013V2.pdf">http://www.issafrica.org/uploads/AF\_8\_14Oct2013V2.pdf</a>.

Collier, Paul. (2007) *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*. Oxford, UK: Oxford University Press.

Elman, Colin. (2005). Explanatory typologies in qualitative studies of international politics. *International Organization* 59(2):293-326.

European Report on Development. (2009) Overcoming Fragility in Africa: Forging a New European Approach. Available at: <a href="http://www.erd-report.eu/erd/report">http://www.erd-report.eu/erd/report</a> 2009/documents/volA/reports/ERD Report-EN.pdf.

Goertz, Gary. (2006). *Social science concepts: A user's guide*. Princeton, NJ: Princeton University Press.

Goldstone, Jack, Ted Robert Gurr, Barbara Harff, Marc Levy, Monty Marshall, Robert Bates, David Epstein, Colin Kahl, Pamela Surko, John Ulfeder, and Alan Unger. (2000) State Failure Task Force Report: Phase III Findings. Political Instability Task Force, MacLean, VA. Science Applications International Cooperation (SAIC), September 30, p. 234.

Gravingholt, Jorn, Sebastian Ziaja, and Merle Kreibaum. (2012) State Fragility: Towards a Multi-Dimensional Empirical Typology. German Development Institute Discussion Paper 3/2012. Available at: file:///C:/Users/Donna/Downloads/SSRN-id2279407.pdf.

Grono, Nick. (2010) Fragile States and Conflict. Available at: http://www.crisisgroup.org/en/publication-type/speeches/2010/fragile-states-and-conflict.aspx.

Huntington, Samuel P. (2006) *Political Order in Changing Societies*. New Haven, CT: Yale University Press.

Jackson, Robert H. (1990) *Quasi-States: Sovereignty, International Relations, and the Third World*, Cambridge, MA: Cambridge University Press.

King, Gary, Robert. O. Keohane, and Sydney Verba. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton, NJ: Princeton University Press.

Lesch, David W. (2012) *Syria: The Fall of the House of Assad*. New Haven, CT: Yale University Press, p. 145.

Marshall, Monty, and Benjamin R. Cole. (2014) Global Report 2014: Conflict, Governance, and State Fragility. Center for Systemic Peace. Available at: <a href="https://www.systemicpeace.org/vlibrary/GlobalReport2014.pdf">www.systemicpeace.org/vlibrary/GlobalReport2014.pdf</a>.

Mata, Javier F., and Sebastian Ziaja. (2009) Users"Guide on Measuring Fragility. German Development Institute and United Nations Development Programme. Available at: http://www.la.undp.org/content/dam/undp/library/Democratic%20Governance/OGC/usersguide\_measure\_fragility\_ogc.pdf.

Mazarr, Michael J. (2013) The rise and fall of the failed-state paradigm: requiem for a decade of distraction. *Foreign Affairs* 93(1):113-121.

Nettl, John P. (1968) The state as a conceptual variable. World Politics 20(4):559-592.

Newman, Edward. (2009) Failed states and international order: constructing a post-Westphalian world. *Contemporary Security Policy* 30(3):421-443.

Pritchett, Lant, Michael Woolcock, and Matt Andrews. (2012) Looking Like a State: Techniques of Persistent Failure in State Capability for Implementation. UNU-WIDER Working Paper 2012/63. Available at: <a href="mailto:file:///C:/Users/Donna/Downloads/wp2012-063.pdf">file:///C:/Users/Donna/Downloads/wp2012-063.pdf</a>.

Rostow, Walt W. (1960) *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge, MA: Cambridge University Press.

Rotberg, Robert I. (2004) *When States Fail: Causes and Consequences*. Princeton, NJ: Princeton University Press.

Tikuisis, Peter, David Carment, and Yiagadeesen Samy. (2013) Prediction of intrastate conflict using state structural factors and events data. *Journal of Conflict Resolution* 57(3):410-444.

Wesley, Michael. (2008) *The State of the Art on the Art of State Building*. Available at: http://www.thefreelibrary.com/The+state+of+the+art+of+the+art+of+state+building.-a0184660897.

Table 1. Typology of state types and their selection criteria based on the 11-year average scores of A, L, C, and FI (blank cells are unconstrained in FI).

| Type | A-          | -L-C and I    | I Criteria  | l      | Description                            |
|------|-------------|---------------|-------------|--------|--|
| Н    | A < 4       | L < 4         | C < 4       |        | Highly functional state in all         |
|      |             |               |             |        | dimensions of stateness                |
| M    | default if  | no other ca   | tegorizatio | on     | Moderately functional state in all     |
|      | criteria m  | net           |             |        | dimensions of stateness                |
| В    | A < 6.5     | L > 6.5       | C < 5.5     |        | Brittle state – functional, especially |
|      |             |               |             |        | in capacity, but lacking legitimacy    |
| I    | A < 6       | L < 6         | C > 6       |        | Impoverished state - authoritative and |
|      |             |               |             |        | legitimate, but lacking capacity       |
| S    | at least or | ne of A, L,   | C > 6,      | FI > 6 | Struggling state – functionally weak   |
|      | and if B    | or I criteria | not met     |        | overall and in most dimensions         |
| F    | A > 6       | L>6           | C > 6       |        | Fragile state – functionally weak in   |
|      |             |               |             |        | all dimensions of stateness            |

# **FIGURES**

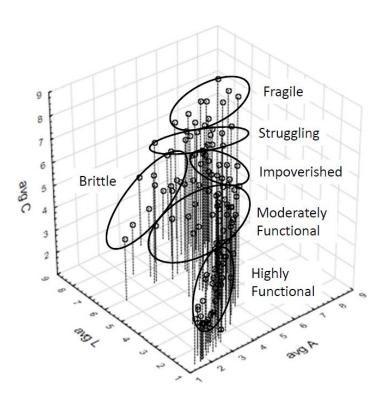


Figure 1. Scatterplot of average A, L, and C scores for 131 states for 2000 - 2010, and approximate location of different state types.

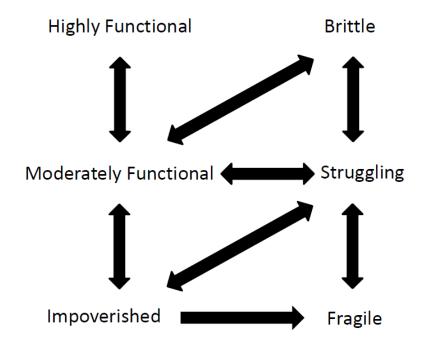


Figure 2. Pathways of state transitions from 2000 to 2010 for 131 states.

APPENDIX: DEFINITION OF INDICATORS

<u>Authority</u>

Government Effectiveness: Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. (source: World Bank

http://info.worldbank.org/governance/wgi/sc chart.asp)

Regulatory Quality: Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (source: World Bank

http://info.worldbank.org/governance/wgi/sc chart.asp)

Political Stability and Absence of Violence: Measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. (source: World Bank <a href="http://info.worldbank.org/governance/wgi/sc chart.asp">http://info.worldbank.org/governance/wgi/sc chart.asp</a>)

Refugees Produced: Refugee population by country or territory of origin. (source: World Bank <a href="http://data.worldbank.org/indicator">http://data.worldbank.org/indicator</a>)

# Legitimacy

Freedom of the Press: Countries are given a total score from 0 (best) to 100 (worst) on the basis of a set of 23 methodology questions divided into three subcategories. The degree to which each country permits the free flow of news and information determines the classification of its media as "Free," "Partly Free," or "Not Free." Countries scoring 0 to 30 are regarded as having "Free" media; 31 to 60, "Partly Free" media; and 61 to 100, "Not Free" media. (source: Freedom House

http://www.freedomhouse.org/report/freedom-press-2012/methodology)

*Political Rights and Civil Liberties*: Political Rights considers to what extent the system offers voters the opportunity to choose freely from among candidates and to what extent the candidates are chosen independently of the state. Civil Liberties does not equate constitutional guarantees of human rights with the on-the-ground fulfillment of these rights. Both laws and actual practices are factored into the ratings decisions. (source: Freedom House <a href="http://www.freedomhouse.org/report/freedom-world-2005/methodology">http://www.freedomhouse.org/report/freedom-world-2005/methodology</a>)

Voice and Accountability: Captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. (source: World Bank <a href="http://info.worldbank.org/governance/wgi/sc chart.asp">http://info.worldbank.org/governance/wgi/sc chart.asp</a>)

Human Rights – Empowerment: An additive (human rights) index constructed from the Freedom of Movement, Freedom of Speech, Workers' Rights, Political Participation, and Freedom of Religion indicators. It ranges from 0 (no government respect for these five rights) to 10 (full government respect for these five rights). (source: CIRI http://www.humanrightsdata.org/myciri/myciri variable definition.asp#28)

# Capacity

GDP Total: GDP in constant 2000 US\$. (source: World Bank http://data.worldbank.org/indicator)

Reserve Holdings: Total reserves including gold in current US \$. (source: World Bank <a href="http://data.worldbank.org/indicator">http://data.worldbank.org/indicator</a>)

Human Development Index: Combination of life expectancy, educational attainment, and income into a composite human development index, which serves as a frame of reference for both social and economic development. The HDI sets a minimum and a maximum for each dimension, called goalposts, and then shows where each country stands in relation to these goalposts, expressed as a value between 0 and 1. (source: UN <a href="https://data.undp.org/dataset/Table-2-Human-Development-Index-trends/efc4-gjvq">https://data.undp.org/dataset/Table-2-Human-Development-Index-trends/efc4-gjvq</a>)

# APPENDIX: STATE CATEGORIZATION

Table of states categorized under Highly functional (H), Moderately functional (M), Brittle (B), Impoverished (I), Struggling (S), and Fragile (F) based on their 11-year (2000 – 2010) averages of authority (A), legitimacy (L), and capacity (C). Also shown are the state's categorization by year (for blank cells, refer to the previous year's assessment).

# **H** (Highly functional states)

| State (n = 29) | A    | L    | C    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|----------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Australia      | 2.04 | 1.64 | 2.31 | 2.00 | Н  |    |    |    |    |    |    |    |    |    |    |
| Austria        | 2.11 | 1.92 | 2.88 | 2.30 | Н  |    |    |    |    |    |    |    |    |    |    |
| Belgium        | 2.44 | 1.46 | 2.75 | 2.21 | Н  |    |    |    |    |    |    |    |    |    |    |
| Canada         | 2.25 | 1.49 | 2.32 | 2.02 | Н  |    |    |    |    |    |    |    |    |    |    |
| Chile          | 3.13 | 2.30 | 3.49 | 2.97 | Н  |    |    |    |    |    |    |    |    |    |    |
| Czech Republic | 3.45 | 2.22 | 3.10 | 2.92 | Н  |    |    |    |    |    |    |    |    |    |    |
| Denmark        | 1.70 | 1.29 | 2.71 | 1.90 | Н  |    |    |    |    |    |    |    |    |    |    |
| Finland        | 1.47 | 1.29 | 2.99 | 1.91 | Н  |    |    |    |    |    |    |    |    |    |    |
| France         | 2.77 | 1.95 | 2.26 | 2.33 | Н  |    |    |    |    |    |    |    |    |    |    |
| Germany        | 2.63 | 2.00 | 2.04 | 2.22 | Н  |    |    |    |    |    |    |    |    |    |    |
| Greece         | 3.36 | 2.91 | 3.18 | 3.15 | Н  |    |    |    |    |    |    |    |    |    |    |
| Hungary        | 3.44 | 2.16 | 3.45 | 3.01 | Н  |    |    |    |    |    |    |    |    |    |    |
| Iceland        | 1.84 | 1.32 | 3.62 | 2.26 | Н  |    |    |    |    |    |    |    |    |    |    |
| Ireland        | 1.87 | 1.64 | 3.04 | 2.18 | Н  |    |    |    |    |    |    |    |    |    |    |
| Italy          | 3.27 | 2.35 | 2.38 | 2.67 | Н  |    |    |    |    |    |    |    |    |    |    |
| Japan          | 2.70 | 2.00 | 1.65 | 2.12 | Н  |    |    |    |    |    |    |    |    |    |    |
| Korea, South   | 3.58 | 2.89 | 2.72 | 3.06 | Н  |    |    |    |    |    |    |    |    |    |    |
| Lithuania      | 3.43 | 2.38 | 3.97 | 3.26 | M  |    |    |    | Н  |    |    |    |    |    |    |
| Netherlands    | 2.12 | 1.42 | 2.51 | 2.01 | Н  |    |    |    |    |    |    |    |    |    |    |
| New Zealand    | 1.72 | 1.30 | 3.00 | 2.01 | Н  |    |    |    |    |    |    |    |    |    |    |
| Norway         | 1.81 | 1.33 | 2.38 | 1.84 | Н  |    |    |    |    |    |    |    |    |    |    |
| Poland         | 3.95 | 2.28 | 3.14 | 3.12 | Н  |    | M  |    |    |    |    | Н  |    |    |    |
| Portugal       | 2.70 | 1.57 | 3.39 | 2.55 | Н  |    |    |    |    |    |    |    |    |    | 1  |
| Slovenia       | 3.14 | 2.03 | 3.36 | 2.84 | Н  |    |    |    |    |    |    |    |    |    |    |
| Spain          | 2.96 | 1.98 | 3.26 | 2.73 | Н  |    |    |    |    |    |    |    |    |    |    |
| Sweden         | 1.92 | 1.35 | 2.56 | 1.94 | Н  |    |    |    |    |    |    |    |    |    |    |
| Switzerland    | 1.97 | 1.46 | 2.48 | 1.97 | Н  |    |    |    |    |    |    |    |    |    |    |
| United Kingdom | 2.56 | 1.77 | 2.39 | 2.24 | Н  |    |    |    |    |    |    |    |    |    |    |
| United States  | 3.03 | 1.71 | 1.55 | 2.10 | Н  |    |    |    |    |    |    |    |    |    |    |
| average        | 2.60 | 1.84 | 2.79 | 2.41 |    |    |    |    |    |    |    |    |    |    |    |

**M** (Moderately functional states; note separation of stronger (Brazil to Uruguay) and weaker (Albania to Venezuela) performing states based on both A and C scores below and above 4.5, respectively – see DISCUSSION)

| State (n = 56)      | A    | L    | C    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|---------------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Brazil              | 4.43 | 3.24 | 3.37 | 3.68 | M  |    |    |    |    |    |    |    |    |    |    |
| Bulgaria            | 4.30 | 3.16 | 4.08 | 3.84 | M  |    |    |    |    |    |    |    |    |    |    |
| Costa Rica          | 3.58 | 2.09 | 4.33 | 3.33 | M  |    |    |    |    |    |    |    |    |    |    |
| Estonia             | 3.09 | 1.90 | 4.04 | 3.01 | M  |    |    |    |    | Н  |    |    |    |    |    |
| Israel              | 4.19 | 3.46 | 2.80 | 3.48 | Н  | M  |    |    |    |    |    |    |    |    |    |
| Kuwait              | 4.18 | 5.92 | 3.76 | 4.62 | M  |    |    |    |    |    |    |    |    |    |    |
| Latvia              | 3.62 | 2.49 | 4.13 | 3.41 | M  |    |    |    |    |    | Н  |    |    |    |    |
| Malaysia            | 3.63 | 6.21 | 3.53 | 4.46 | M  |    |    |    |    |    |    |    |    |    |    |
| Malta               | 2.30 | 1.70 | 4.16 | 2.72 | M  |    |    |    |    |    |    |    |    |    |    |
| Panama              | 3.85 | 2.98 | 4.35 | 3.73 | M  |    |    |    |    |    |    |    |    |    |    |
| Singapore           | 1.95 | 5.92 | 3.81 | 3.89 | M  |    |    |    |    |    |    |    |    |    |    |
| Thailand            | 4.49 | 4.70 | 3.91 | 4.37 | M  |    |    |    |    |    |    |    |    |    |    |
| Trinidad and Tobago | 3.81 | 2.78 | 4.32 | 3.64 | M  |    |    |    |    |    |    |    |    |    |    |
| Uruguay             | 3.46 | 2.14 | 4.09 | 3.23 | M  |    |    |    |    |    |    | Н  |    |    |    |
| Albania             | 5.42 | 4.23 | 4.70 | 4.78 | M  |    |    |    |    |    |    |    |    |    |    |
| Argentina           | 4.94 | 3.26 | 3.24 | 3.81 | M  |    |    |    |    |    |    |    |    |    |    |
| Armenia             | 5.21 | 5.93 | 5.03 | 5.39 | M  |    |    |    |    |    |    |    |    | В  |    |
| Bangladesh          | 6.15 | 5.54 | 5.52 | 5.74 | M  |    |    |    |    |    |    |    |    |    |    |
| Belize              | 3.98 | 2.30 | 5.49 | 3.92 | M  |    |    |    |    |    |    |    |    |    |    |
| Bolivia             | 5.17 | 3.75 | 4.92 | 4.62 | M  |    |    |    |    |    |    |    |    |    |    |
| Botswana            | 2.94 | 3.18 | 5.05 | 3.72 | M  |    |    |    |    |    |    |    |    |    |    |
| Cambodia            | 5.88 | 6.10 | 5.97 | 5.98 | S  | I  |    | S  |    |    | M  |    |    |    |    |
| Colombia            | 6.08 | 4.91 | 4.00 | 5.00 | M  |    |    |    |    |    |    |    |    |    |    |
| Croatia             | 4.72 | 3.41 | 3.82 | 3.98 | M  |    |    |    |    |    |    |    |    |    |    |
| Dominican Republic  | 4.54 | 3.65 | 4.67 | 4.28 | M  |    |    |    |    |    |    |    |    |    |    |
| Ecuador             | 5.66 | 4.23 | 4.52 | 4.80 | M  |    |    |    |    |    |    |    |    |    |    |
| El Salvador         | 4.87 | 3.57 | 4.81 | 4.42 | M  |    |    |    |    |    |    |    |    |    |    |
| Fiji                | 4.95 | 4.72 | 5.26 | 4.98 | M  |    |    |    |    |    |    |    |    |    |    |
| Gabon               | 4.55 | 6.10 | 5.21 | 5.29 | M  |    |    |    |    |    |    |    | В  |    | M  |
| Ghana               | 5.05 | 3.37 | 5.91 | 4.78 | I  |    |    |    | M  |    |    |    |    |    |    |
| Guatemala           | 5.56 | 4.65 | 5.22 | 5.15 | M  |    |    |    |    |    |    |    |    |    |    |
| Guyana              | 4.88 | 3.07 |      | 4.60 | I  |    | M  |    |    |    |    |    |    |    |    |
| Honduras            | 5.16 | 4.40 |      | 4.93 | M  |    |    |    |    |    |    |    |    |    |    |
| India               | 5.56 | 3.90 |      | 4.61 | M  |    |    |    |    |    |    |    |    |    |    |
| Indonesia           | 5.96 | 4.99 |      | 5.10 | M  |    |    |    |    |    |    |    |    |    |    |
| Jamaica             | 4.40 | 2.72 |      | 3.91 | M  |    |    |    |    |    |    |    |    |    |    |
| Jordan              | 4.57 | 6.39 |      | 5.19 | M  |    | В  | M  |    |    |    |    |    | В  |    |
| Kenya               | 5.74 | 5.68 | 5.81 | 5.74 | S  |    | M  |    |    |    |    |    |    |    |    |

# DRDC-RDDC-2014-P105

| Kyrgyzstan   | 5.65 | 6.49 | 5.68 | 5.94 | M | S |  | M |  | В |   |
|--------------|------|------|------|------|---|---|--|---|--|---|---|
| Maldives     | 3.49 | 6.15 | 5.83 | 5.15 | M |   |  |   |  |   |   |
| Mauritius    | 3.19 | 2.23 | 4.76 | 3.40 | M |   |  |   |  |   |   |
| Mexico       | 4.67 | 3.87 | 3.14 | 3.89 | M |   |  |   |  |   |   |
| Moldova      | 5.49 | 5.23 | 5.53 | 5.42 | M |   |  |   |  |   |   |
| Morocco      | 4.93 | 6.08 | 4.91 | 5.30 | M |   |  |   |  |   |   |
| Namibia      | 4.25 | 3.29 | 5.49 | 4.34 | M |   |  |   |  |   |   |
| Nicaragua    | 5.35 | 4.09 | 5.65 | 5.03 | M |   |  |   |  |   |   |
| Paraguay     | 5.17 | 4.55 | 5.05 | 4.93 | M |   |  |   |  |   |   |
| Peru         | 5.29 | 3.85 | 4.01 | 4.38 | M |   |  |   |  |   |   |
| Philippines  | 5.32 | 3.79 | 4.30 | 4.47 | M |   |  |   |  |   |   |
| Romania      | 4.68 | 3.74 | 3.78 | 4.07 | M |   |  |   |  |   |   |
| Seychelles   | 3.92 | 4.63 | 4.60 | 4.38 | M |   |  |   |  |   |   |
| South Africa | 3.95 | 2.72 | 4.99 | 3.89 | M |   |  |   |  |   |   |
| Sri Lanka    | 6.04 | 5.51 | 5.11 | 5.55 | M |   |  |   |  |   | В |
| Turkey       | 5.53 | 5.17 | 3.73 | 4.81 | M |   |  |   |  |   |   |
| Ukraine      | 5.71 | 5.10 | 4.09 | 4.97 | M |   |  |   |  |   |   |
| Venezuela    | 6.13 | 5.59 | 3.82 | 5.18 | M |   |  |   |  |   | В |
| average      | 4.67 | 4.19 | 4.59 | 4.49 |   |   |  |   |  |   |   |

# **B** (Brittle states)

| State (n = 12) | A    | L    | C    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|----------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Algeria        | 6.17 | 6.75 | 4.04 | 5.65 | В  |    | M  | В  |    |    |    |    |    |    |    |
| Bahrain        | 3.64 | 6.62 | 4.05 | 4.77 | В  |    | M  |    |    | В  |    | M  |    | В  |    |
| China          | 5.63 | 8.30 | 3.22 | 5.72 | В  |    |    |    |    |    |    |    |    |    |    |
| Egypt          | 5.48 | 7.01 | 4.32 | 5.60 | В  |    |    |    |    |    |    |    |    |    |    |
| Kazakhstan     | 5.12 | 7.16 | 4.20 | 5.50 | В  |    |    |    |    |    |    |    |    |    |    |
| Pakistan       | 6.50 | 6.74 | 5.25 | 6.16 | S  |    | В  |    |    | M  | В  |    |    |    | S  |
| Russia         | 5.94 | 6.73 | 3.26 | 5.31 | M  |    |    |    |    | В  |    |    |    |    |    |
| Saudi Arabia   | 4.66 | 8.48 | 4.17 | 5.77 | В  |    |    |    |    |    |    |    |    |    |    |
| Syria          | 6.08 | 8.30 | 4.86 | 6.41 | В  |    |    |    |    |    |    |    |    |    |    |
| Tunisia        | 4.39 | 7.22 | 4.52 | 5.38 | В  |    |    |    |    |    |    |    |    |    |    |
| UAE            | 3.22 | 7.12 | 3.27 | 4.54 | В  |    |    |    |    |    |    |    |    |    |    |
| Vietnam        | 5.73 | 8.10 | 4.92 | 6.25 | В  |    |    |    |    |    |    |    |    |    |    |
| average        | 5.21 | 7.38 | 4.17 | 5.59 |    |    |    |    |    |    |    |    |    |    |    |

# I (Impoverished states)

| State (n = 13) | A    | L    | C    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|----------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Benin          | 4.51 | 3.44 | 6.62 | 4.86 | I  |    |    |    |    |    |    |    |    |    |    |
| Gambia         | 4.92 | 5.96 | 7.24 | 6.04 | S  | I  |    |    |    | S  | I  |    | S  |    |    |
| Madagascar     | 4.77 | 4.53 | 6.26 | 5.19 | I  |    |    |    |    |    |    |    |    |    | S  |
| Malawi         | 4.70 | 4.74 | 7.11 | 5.52 | I  |    |    |    |    |    |    |    |    |    |    |
| Mali           | 4.99 | 3.18 | 7.07 | 5.08 | I  |    |    |    |    |    |    |    |    |    |    |

# DRDC-RDDC-2014-P105

| Mozambique       | 4.55 | 4.59 | 7.09 | 5.41 | I |   |   |   |   |   |   |   |   |
|------------------|------|------|------|------|---|---|---|---|---|---|---|---|---|
| Niger            | 5.38 | 5.02 | 7.58 | 5.99 | I |   |   |   |   |   |   | S | I |
| Papua New Guinea | 4.94 | 3.55 | 6.34 | 4.94 | I |   |   |   |   |   |   |   |   |
| Senegal          | 5.28 | 4.07 | 6.55 | 5.30 | I |   |   |   |   |   |   |   |   |
| Solomon Islands  | 5.29 | 3.38 | 6.01 | 4.89 | I | M |   | I | M |   |   |   |   |
| Tanzania         | 5.04 | 5.28 | 6.12 | 5.48 | I |   |   |   |   | M |   |   |   |
| Uganda           | 5.93 | 5.95 | 6.32 | 6.06 | F |   | S | I |   |   | M |   |   |
| Zambia           | 4.79 | 5.32 | 6.63 | 5.58 | I |   |   |   |   |   |   |   |   |
| average          | 5.01 | 4.54 | 6.69 | 5.41 |   |   |   |   |   |   |   |   |   |

# **S** (Struggling states)

| State (n = 9) | A    | L    | C    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|---------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Angola        | 6.88 | 6.94 | 5.91 | 6.58 | F  |    |    |    |    | S  |    |    | В  |    |    |
| Cameroon      | 5.78 | 7.10 | 6.04 | 6.31 | S  |    |    |    |    |    |    |    |    |    |    |
| Congo, Rep.   | 6.60 | 5.85 | 6.06 | 6.17 | F  |    | S  |    |    |    |    |    |    |    | M  |
| Haiti         | 6.62 | 5.94 | 6.56 | 6.37 | S  | F  |    |    |    |    |    | S  |    | M  | S  |
| Liberia       | 7.34 | 5.86 | 7.90 | 7.03 | F  |    |    |    |    | S  |    |    |    |    |    |
| Mauritania    | 5.62 | 6.20 | 6.86 | 6.23 | S  |    | I  | S  |    |    | I  |    | F  |    |    |
| Nepal         | 6.11 | 5.87 | 6.25 | 6.08 | I  |    |    |    | F  |    |    | S  | F  | M  |    |
| Sierra Leone  | 6.51 | 5.25 | 7.21 | 6.32 | F  | S  |    |    |    |    |    |    |    |    | I  |
| Swaziland     | 4.53 | 7.38 | 6.26 | 6.06 | S  | M  |    | S  |    |    | M  | S  |    |    | M  |
| average       | 6.22 | 6.27 | 6.56 | 6.35 |    |    |    |    |    |    |    |    |    |    |    |

# **F** (Fragile states)

| State (n = 12)   | A    | L    | С    | FI   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|------------------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|
| Burundi          | 7.42 | 6.53 | 7.83 | 7.26 | F  |    |    |    |    |    |    | S  | F  | S  | F  |
| CAR              | 7.03 | 6.36 | 7.53 | 6.97 | I  | F  |    |    |    |    |    |    |    |    |    |
| Chad             | 6.85 | 7.10 | 7.30 | 7.08 | F  |    |    |    |    |    |    |    |    |    |    |
| Congo, Dem. Rep. | 8.02 | 7.86 | 7.52 | 7.80 | S  |    | F  |    |    |    |    |    |    |    |    |
| Cote d'Ivoire    | 6.64 | 7.00 | 6.38 | 6.67 | F  |    |    |    |    |    |    |    |    |    |    |
| Ethiopia         | 6.62 | 6.70 | 6.81 | 6.71 | S  | F  |    |    |    |    |    |    |    |    |    |
| Laos             | 6.05 | 8.00 | 6.30 | 6.78 | F  |    |    |    |    |    | S  |    |    |    |    |
| Rwanda           | 6.19 | 7.37 | 6.91 | 6.82 | F  |    |    |    |    |    | S  |    |    |    |    |
| Sudan            | 7.65 | 8.44 | 6.42 | 7.50 | F  |    |    |    |    |    |    |    |    |    |    |
| Tajikistan       | 6.46 | 7.21 | 6.05 | 6.57 | F  |    |    |    |    | S  |    |    |    |    |    |
| Togo             | 6.11 | 6.88 | 6.78 | 6.59 | S  |    |    | F  |    |    |    |    |    |    |    |
| Yemen, Rep.      | 6.12 | 7.20 | 6.03 | 6.45 | S  |    |    |    | F  | S  |    |    |    |    |    |
| average          | 6.76 | 7.22 | 6.82 | 6.93 |    |    |    |    |    |    |    |    |    |    |    |

## APPENDIX: CASE STUDIES

The evaluation of state status from 1996 to 1999 was based on a backward extrapolation of STM, as sufficient indicator data were available in the cases presented below.

## Haiti

Haiti began in S status, but deterioration of state authority (primarily due to political instability) and especially legitimacy (all four indicators) began in 2000 and peaked in 2003-04 leading to F status (see Figure 1). Subsequent improvement in all dimensions of stateness elevated Haiti to S and then M status, mostly driven by legitimacy (all indicators). Slippage to S status in 2010 was primarily due to a small deterioration in A (government effectiveness, regulatory quality, and political stability indicators).

Haiti's evolution from 1996 to 2010 was marked by a number of key inflection points beginning with relative stability from 1996 to 2000 in each of the three A-L-C dimensions. In 2000, both A and L underwent sharp upward spikes, ostensibly related to the political turmoil surrounding the May and November 2000 elections, which were marked by accusations of fraud and irregular ballot counting (Verner and Kuttner 2007). Although Aristide remerged as president, the legitimacy of his office and administration was severely damaged corresponding to the STM visualization in Figure 1 below. From 2000 to 2004, negotiations between the opposition and the ruling government were fierce, as violence between the state security forces and the self-organized opposition groups ramped up at the peak of Haiti's fragility in 2003-2004. Indeed, the political violence had become a low-intensity war that played out in the disputed urban areas of the country.

Then in the 2006 elections, 63% of the eligible electorate participated in a peaceful vote (Verner and Kuttner 2007). Although far from perfect, legitimacy improved, which positively affected the country's fragility score (see Figure 1). Indeed, the electoral process appeared to provide space for positive engagement between the opposition and governing party despite their wide differences. By 2009, there had been no major instances of political upheaval even though Haiti's political system had generally been captured by the country's elite class and pitted against the large population of urban and

rural poor. It is important to note that while Haiti's general trajectory appeared to be improving through more representative government and modest investments in economic and social developments, the 2010 earthquake devastated the country's already weak institutions and infrastructure. Exploration of this event and its effects on fragility exceed the timeline of this paper, however, it is noteworthy that resilience to phenomenon such as natural disasters is also captured by the STM. In this case, despite having achieved moderately functional status in 2009, Haiti's vulnerability caused it to fall back into the struggling category in 2010 with continued deterioration. <sup>17</sup>

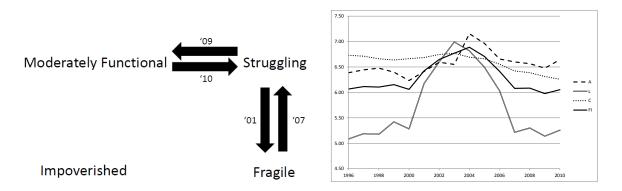


Figure 1. Evolution of Haiti from 1996 to 2010.

## Mauritania

Mauritania experienced turbulent shifts that ultimately ended in F status (see Figure 2). All indicators of legitimacy oscillated from 1996 to 2010 with little net change. Capacity was stagnant during the first half of this period, but then improved slightly in all indicators. The major driver of change in status was a sharp deterioration in authority after 2002, driven by worsening government effectiveness, regulatory quality, and political stability.

Mauritania is deeply vulnerable to a myriad of internal stresses and exogenous shocks. Marked by extremely low capacity as one of the poorest nations in the world, the government of Mauritania is invariably unable to develop strong state institutions or project power beyond the narrow confines of its capital. This in turn leads to political instability and a more generalized insecurity both within the country and regionally. Weak

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<sup>&</sup>lt;sup>17</sup> Indeed, Haiti's status has since deteriorated according to FSI: http://ffp.statesindex.org/fsi-trends-2013.

governance and pervasive corruption plague the country, and the government relies primarily on foreign aid for its budgetary needs. This has led to a client-dependent relationship between the state and foreign donors that at the same time has served to undermine the government's accountability to its population. <sup>18</sup>

Politically, Mauritania has undergone a number of shocks. The country was ruled by a single leader (Ould Taya) from 1984 until 2005 and there were no significant changes in the three A-L-C dimensions during the period 1996 - 2010, as seen in Figure 2. However, there were a number of attempted military coups in the early 2000s (Marty 2002, BTI 2012a). A successful coup in 2005 removed Taya from power and established a military government that promised free and fair elections within two years (BTI 2012a), which were held in 2006 and 2007. Although Sidi Ould Cheikh Abdellahi won the election, his tenure lasted only 17 months due to a second coup in 2008 perpetrated by the same officers responsible for the first coup (BTI 2012a). This political instability is demonstrated by Figure 2 where the 2005 coup appears to have had a role in moving Mauritania from S to I status, while the 2008 coup caused a spike in worsening legitimacy, ultimately pulling the country into F status. It is also clear that authority worsened after 2002, reflecting the uncertainty of the political situation in the country since then.

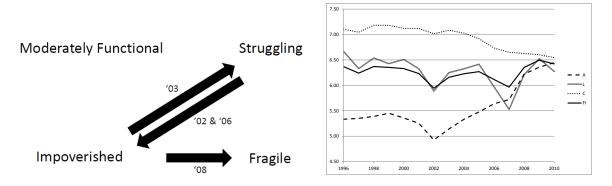


Figure 2. Evolution of Mauritania from 1996 to 2010.

Uganda

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<sup>&</sup>lt;sup>18</sup> Transparency International's 2010 Corruption Perceptions Index ranks Mauritania 143<sup>rd</sup> out of 178 countries. <a href="http://www.transparency.org/cpi2010/results">http://www.transparency.org/cpi2010/results</a>.

Uganda was in I status from 1996 to 1999 and then transitioned to F status in 2000. From 2002 to 2006, Uganda exhibited continual improvement in all dimensions of stateness thereby elevating its status from F through S to I (see Figure 3). Improvement in authority was achieved through improvements in political stability and refugee status. Legitimacy improved through fewer restrictions in political rights and civil liberties, and in more voice and accountability in decision making, but suffered as a result of degradation in freedom of the press. Capacity improved continuously in all indicators, which was primarily responsible for Uganda achieving M status in 2008.

Uganda provides an excellent example of a country that has undergone sporadic transition, moving through four categories of STM within 14 years. Poor state capacity was the key driver of fragility in the mid-1990s; however, as can be seen in Figure 3, Uganda experienced continual and marked improvements in capacity from 1996 to 2010. These economic improvements played a crucial role in transitioning Uganda from an impoverished state to a moderately functional one. Complex political realities combined with the oscillating northern conflict also affected the country's evolution. Led by President Museveni, the National Resistance Movement (NRM) gained power in 1996. Multiparty democracy was replaced by a "movement" system, which consisted of grassroots local councils that supposedly allowed participatory governance (BTI 2012b). The gradual spike in legitimacy seen in Figure 3 from 1996 to 2000 corresponds to real or perceived discontent with the political system during this period. Yet, in 2000, the majority of voters decided to retain the system and the NRM remained entrenched in power, thereby improving the legitimacy of the governing party and its movement system. At the time of the election, though, the opposition that emerged was brutally and systematically suppressed by the ruling party (BTI 2012b). By 2005, voters chose to open the political system up to multiple parties, and improvements in both authority and legitimacy at this time can be seen in Figure 3, although they were short-lived. In 2006. the constitutional two-term limit of the president was lifted allowing Museveni to run for a third term (BTI 2012b), causing an upward (worsening) spike in legitimacy.

Another major factor in the evolution of Uganda is the northern conflict between the government and the Lord's Resistance Army (LRA). Since the mid-1980s, the LRA has terrorized the northern region of the country in a bid for secession from the southern government. Although negotiations were held in 2006, a final peace agreement was not signed (BTI 2012b). Subsequently, a major military push by the Ugandan security forces drove the LRA mostly out of the country, thus reducing the security threat and helping elevate the country to M status.

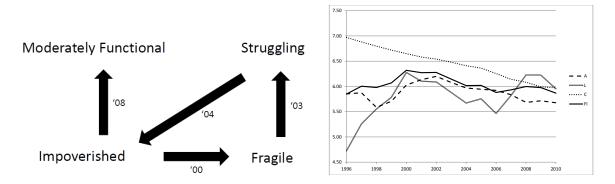


Figure 3. Evolution of Uganda from 1996 to 2010.

# Pakistan

Pakistan is seen to have shifted numerous times beginning with a brief transition from S to M status (1997) and back again (1999) despite steady improvement in capacity (see Figure 4). Pakistan then transitioned to B status in 2002 following a rapid deterioration in legitimacy in 1999 and worsening of authority beginning in 2000. Oscillation in legitimacy thereafter led to a brief transition to M status, then back to B status, and finally ending in S status in 2010.

Pakistan has consistently ranked in the top 20 most fragile states according to the FSI<sup>19</sup> and the CIFP fragility index (Carment, Prest, and Samy 2009). While Pakistan has undergone steady improvements in economic performance, poor governance and political instability have marred its ability to escape the fragility trap. Figure 4 illustrates Pakistan's two short-lived periods in M status; however, the brevity of the transitions highlights the

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<sup>&</sup>lt;sup>19</sup> See <a href="http://ffp.statesindex.org/fsi-trends-2013">http://ffp.statesindex.org/fsi-trends-2013</a>.

instability of the country, particularly with regard to authority and legitimacy. From 1999 to 2007, General Pervez Musharraf controlled the state through the military, and violent struggles between his party and the left-leaning opposition were common. This volatility is visualized in Figure 4, primarily in legitimacy, but also in authority. The transition from M to S status in 1999 was related to the military coup, which undermined the legitimacy of the governing regime. Afterwards, however, as capacity continued to improve and Musharraf's strong—armed leadership proved effective, legitimacy began to level off. Voters rejected the Musharraf regime in 2008 by voting in a coalition government of left-wing socialists and right-wing conservatives; just two years later Pakistan devolved from B to S status.

Massive inequality is a hallmark of the Pakistani state and the entrenchment of this divide between urban elites and rural poor has continually created problems for the legitimacy of the state. Indeed, "[t]he key attributes of the governance structure are a highly centralized government, heavy investment in the military security apparatus, and a very weak middle class" (Carment, Landry, and Samy 2013). These indications of shocks to both authority and legitimacy are commonplace and highly destabilizing. Secessionist movements on the part of armed militias in the hinterlands represent one such challenge to authority, while the volatile political situation has consistently caused ebbs and flows in legitimacy. Another issue, which is similar in the case of Mauritania, is the high dependence on foreign aid, particularly from the United States. Again, such dependence results in a non-progressive client relationship between the state and its primary donors that further undermines the development of a reliable tax base in Pakistan.

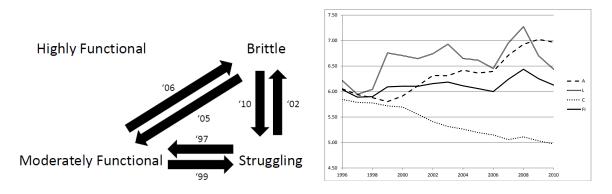


Figure 4. Evolution of Pakistan from 1996 to 2010.

## REFERENCES

BTI. (2012a) *Mauritania Country Report*. Gütersloh: Bertelsmann Stiftung Transformation Index. Available at: <a href="http://www.btiproject.org/fileadmin/Inhalte/reports/2012/pdf/BTI%202012%20Mauritania.pdf">http://www.btiproject.org/fileadmin/Inhalte/reports/2012/pdf/BTI%202012%20Mauritania.pdf</a>.

BTI. (2012b) *Uganda Country Report*. Gütersloh: Bertelsmann Stiftung Transformation Index. Available at: <a href="http://www.btiproject.de/fileadmin/Inhalte/reports/2012/">http://www.btiproject.de/fileadmin/Inhalte/reports/2012/</a>
<a href="pdf/BTI%202012%20Uganda.pdf">pdf/BTI%202012%20Uganda.pdf</a>.

Carment, David, Stewart Prest, and Yiagadeesen Samy. (2009) Security, Development and the Fragile State: Bridging the Gap Between Theory and Policy. New York, NY: Routledge.

Carment, David, Joseph Landry, and Yiagadeesen Samy. (2013) Transitioning fragile states: a sequencing approach. *The Fletcher Forum of World Affairs* 37(2):125-151.

Marty, Marianne. (2002) Mauritania: political parties, neo-patrimonialism and democracy. <u>Democratization 9(3):92-108.</u>

Verner, Dorte, and Stephanie Kuttner. (2007) *Social Resilience and State Fragility in Haiti*. World Bank. Available at <a href="https://openknowledge.worldbank.org/bitstream/handle/10986/6836/409270PAPER0HT1010FFICIAL0USE00NLY1.pdf?sequence=1">https://openknowledge.worldbank.org/bitstream/handle/10986/6836/409270PAPER0HT1010FFICIAL0USE00NLY1.pdf?sequence=1</a>.

## APPENDIX: ARMED CONFLICT

Conflict data were obtained from Uppsala University with the caveat that conflict death estimation is inexact (Spagat et al. 2009), <sup>20</sup> hence, this analysis should be viewed as approximate. The Uppsala Conflict Data Program (UCDP)<sup>21</sup> criteria of armed conflict is defined as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths." Two intensity levels (1 and 2) are used pertaining to 25 – 999 and 1000+ deaths, respectively. Conflict type is herein limited to "internal armed conflict between the government of a state and one or more internal opposition group(s) without intervention from other states". <sup>22</sup>

Table 1 shows the occurrence and intensity of intrastate armed conflict deaths that occurred in 34 out of the 131 states analyzed. Of particular note is that no internal conflict deaths occurred in highly functional (H) states. The number (and percentage) of other states that experienced fatal internal armed conflict are 10/56 (17.9%, M), 4/12 (33.3%, B), 4/13 (30.8%, I), 5/9 (55.6%, S), and 9/12 (75.0%, F). More informative is the relative incident percentage expressed by the product of conflict *intensity* x *duration*. Defining the maximum product as 2 (max intensity) x 11 (years) = 22 per state, the cumulative incident percentages are 8.7 (M), 12.1 (B), 5.9 (I), 11.1 (S), and 23.9% (F) of the maximum.

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<sup>&</sup>lt;sup>20</sup> Spagat, Michael, Andrew Mack, Tara Cooper, and Joakim Kreutz. (2009) Estimating war deaths: an arena of contestation. *Conflict Management and Peace Science* 53(6):934-950.

The UCDP Armed Conflict Dataset is a joint project between the Uppsala Conflict Data Program (UCDP) at the Department of Peace and Conflict Research, Uppsala University, and the Centre for the Study of Civil War at the International Peace Research Institute in Oslo; dataset access: <a href="http://www.pcr.uu.se/research/ucdp/datasets/ucdp">http://www.pcr.uu.se/research/ucdp/datasets/ucdp</a> battle-related deaths dataset/.

Defined by UCDP as Type 3.

Table 1. Annual deaths [light and dark shades refer to levels 1 (25 – 999 deaths/year) and 2 (1000+ deaths/year), respectively] due to intrastate armed conflict without intervention from other states. M, B, I, S, and F refer to moderately functional, brittle, impoverished, struggling, and fragile states, respectively.

| M (n = 10/56)  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|
| Bangladesh     |      |      |      |      |      |      |      |      |      |      |      |
| Colombia       |      |      |      |      |      |      |      |      |      |      |      |
| India          |      |      |      |      |      |      |      |      |      |      |      |
| Indonesia      |      |      |      |      |      |      |      |      |      |      |      |
| Israel         |      |      |      |      |      |      |      |      |      |      |      |
| Peru           |      |      |      |      |      |      |      |      |      |      |      |
| Philippines    |      |      |      |      |      |      |      |      |      |      |      |
| Sri Lanka      |      |      |      |      |      |      |      |      |      |      |      |
| Thailand       |      |      |      |      |      |      |      |      |      |      |      |
| Turkey         |      |      |      |      |      |      |      |      |      |      |      |
| B $(n = 4/12)$ |      |      |      |      |      |      |      |      |      |      |      |
| Algeria        |      |      |      |      |      |      |      |      |      |      |      |
| China          |      |      |      |      |      |      |      |      |      |      |      |
| Pakistan       |      |      |      |      |      |      |      |      |      |      |      |
| Russia         |      |      |      |      |      |      |      |      |      |      |      |
| I(n = 4/13)    |      |      |      |      |      |      |      |      |      |      |      |
| Mali           |      |      |      |      |      |      |      |      |      |      |      |
| Niger          |      |      |      |      |      |      |      |      |      |      |      |
| Senegal        |      |      |      |      |      |      |      |      |      |      |      |
| Uganda         |      |      |      |      |      |      |      |      |      |      |      |
| S(n = 5/9)     |      |      |      |      |      |      |      |      |      |      |      |
| Angola         |      |      |      |      |      |      |      |      |      |      |      |
| Haiti          |      |      |      |      |      |      |      |      |      |      |      |
| Liberia        |      |      |      |      |      |      |      |      |      |      |      |
| Nepal          |      |      |      |      |      |      |      |      |      |      |      |
| Sierra Leone   |      |      |      |      |      |      |      |      |      |      |      |
| F(n = 9/12)    |      |      |      |      |      |      |      |      |      |      |      |
| Burundi        |      |      |      |      |      |      |      |      |      |      |      |
| CAR            |      |      |      |      |      |      |      |      |      |      |      |
| Chad           |      |      |      |      |      |      |      |      |      |      |      |
| DRC            |      |      |      |      |      |      |      |      |      |      |      |
| Cote d'Ivoire  |      |      |      |      |      |      |      |      |      |      |      |
| Ethiopia       |      |      |      |      |      |      |      |      |      |      |      |
| Rwanda         |      |      |      |      |      |      |      |      |      |      |      |
| Sudan          |      |      |      |      |      |      |      |      |      |      |      |
| Tajikistan     |      |      |      |      |      |      |      |      |      |      |      |